



# City of Santa Barbara Request For Proposals - Water Supply Planning Study August , 2008

The City of Santa Barbara is requesting proposals from qualified consulting firms to perform a Water Supply Planning Study addressing specific water supply planning issues. The City wishes to have the study completed at least to the point of a complete draft final report within eight weeks of the City's notice to proceed. The City has budgeted approximately \$200,000 for the study.

# **Objectives**

Information from the project will be used in updating the City's General Plan and the 1994 Long-Term Water Supply Program (LTWSP). The planning process will address the period of 2010 through 2030. The objectives of this project are to:

- Determine the current state of research on the status of climate change and its likely effect on the City's water supply.
- Evaluate the expected reliability of State Water Project deliveries and alternatives for improving reliability.
- Assess options for expanded use of the City's existing recycled water system, including engineering analysis and concept design of potential system extensions and evaluation of new uses of recycled water.
- Assess the City's current water conservation program, identify opportunities for additional water savings, and evaluate these opportunities in terms of feasibility, programs costs, and savings potential.
- Obtain a "fresh look" at the City's overall water supply program in terms of potential new water management strategies, operational improvements, reliability enhancements, cost savings, and energy use reductions.

The study will be used in conjunction with a number of other technical analyses currently planned or underway in anticipation of the LTWSP update. These include a rehabilitation assessment of the cost and regulatory issues associated with a potential future use of the City's desalination facility and an update of the City's water supply modeling capabilities using RiverWare software in conjunction with an existing MODFLOW model of the City's groundwater basins.

A copy of the LTWSP and other relevant information will be available on the City's FTP site by Monday, August 11, 2008 at the following Internet address:

http://www.santabarbaraca.gov/Files/public works/Water Supply Study

### Scope of Services to be Provided by the Consultant

Proposals should address, at a minimum, the work items below, as well as other relevant issues identified by the proposers. The level of effort with regard to cost estimating should be sufficient to provide a planning and budgeting level of accuracy.

### Task #1 – Project Administration, Introductory Research, and Reporting

- A. Meet with City staff for a general orientation and introduction to the City's water supply.
- B. Review relevant technical and planning documents, including but not limited to:
  - 1. Long-Term Water Supply Alternatives Analysis (April 1991)
  - 2. Long-Term Water Supply Program (July 5, 1994)
  - 3. Long-Term Water Supply Program EIR (April 15, 1994)
  - 4. City of Santa Barbara Urban Water Management Plan 2005 update
  - Design Reports on Phase 1 and Phase 2 of the Recycled Water System
  - 6. Reclaimed Water Management Plan (December 1992)
  - 7. Tertiary Filter Rehabilitation Project Report (July 2008)
  - 8. Coastal Branch State Water Project EIR
  - 9. Central Coast Water Authority (CCWA) Urban Water Management Plan
  - 10. CCWA website
  - 11. Water Conservation Program Summary (June 2008)
  - 12.1995 Water Rate Study
- C. Participate in a tour of City water supply, treatment, conveyance, and distribution and recycling facilities
- D. Meet with staff to confirm understanding of primary water supply issues and refine work items as necessary to focus the work effort, and as necessary during the project.
- E. Prepare draft report(s) and submit to City for comment in hardcopy and PDF format.
- F. Prepare final report in hardcopy and PDF format.

# <u>Task #2 – State Water Project (SWP) Reliability Assessment</u>

- A. Research and document the current state of scientific opinion on future SWP water supply impacts associated with climate change, including changes in temperature, snow, and rainfall patterns affecting SWP supply sources. In particular, include review of the most current reports and analyses conducted by the California Department of Water Resources and other State agencies.
- B. Evaluate other vulnerabilities affecting SWP reliability, including seismic risk, levee breaks in the Delta, and environmental limitations on deliveries of water through the Delta.
- C. Based on the above, evaluate and estimate the likely effects on future deliveries of the City's entitlement of SWP water in the absence of major SWP improvements.

- D. Research planned and proposed SWP improvements that aim to improve SWP reliability, including but not limited to, proposals for construction of an "isolated facility" or "peripheral canal" to convey water around the Delta, and summarize likely costs and benefits resulting from such improvements.
- E. Evaluate the costs and feasibility of groundwater banking as a way to firm up deliveries of SWP water through the Coastal Branch of the SWP.

#### Task #3 – Localized Climate Change Impact Assessment

- A. Research and document the current state of scientific opinion on the likely effect of climate change on local (Santa Barbara County) weather patterns.
- B. To the extent a credible estimate can be made, evaluate and characterize the likely effects of climate change on local surface water supplies from Lake Cachuma and Gibraltar Reservoir in terms of:
  - 1. Changes in annual quantities of rainfall;
  - 2. Changes in intensity and distribution of rainfall throughout the year;
  - 3. Changes in critical drought period duration, intensity, and frequency.
- C. Evaluate whether it is practical to determine whether a significant change in irrigation demand by City water customers can be anticipated as a result of climate change.

### Task #4 – Recycled Water Expansion Assessment

- A. Review available City planning studies, design memoranda, as-built drawings, and operations records to gain an understanding of the City's recycled water system, including: treatment and distribution facilities, consumption records, regulatory documents, usage schedules, salinity targets, and potable water blending to meet a target maximum of 300 mg/L chloride.
- B. Identify potential additional uses of recycled water <u>adjacent to the existing system</u>, including but not limited to residential and non-residential irrigation, toilet flushing in non-residential structures, and commercial/industrial processes. Evaluate the technical, logistical, regulatory, and water quality issues associated with such uses and the extent to which the existing system would constrain such uses.
- C. Identify the most attractive irrigation and other recycled water use opportunities in areas <u>not currently adjacent</u> to the recycled water system. Develop conceptual design and preliminary cost estimates for construction of main extensions and other required system improvements needed to serve such uses, including needed improvements to the existing system that would otherwise constrain such expanded use.
- D. Given salt levels in the City's recycled water, identify appropriate targets for key recycled water quality parameters, assuming a goal of making recycled water generally acceptable for use on most ornamental landscaping. Identify and evaluate opportunities for achieving such targets including.
- E. Based on the above, develop a conceptual program of feasible expansions of the use of recycled water to displace potable water use. Itemize and evaluate the resulting system improvements, ordinance changes, regulatory issues, usage schedule modifications, energy usage, and cost impacts.

### Task #5 – Conservation Opportunities Assessment

- A. Review existing City Water Conservation Program elements and history.
- B. Research and document progressive conservation programs in California or other western states and identify program elements with potential applicability to the City of Santa Barbara.
- C. Identify effective data analysis strategies for identifying customer subgroups that are candidates for targeted conservation services.
- D. Evaluate the City's newly acquired CIS Infinity utility billing system in terms of ability to identify savings potential among the City's customers, track program activity, and report on savings achieved.
- E. Inventory available software aimed specifically at water conservation program tracking and management, compare to the capabilities of the CIS Infinity system, and summarize capabilities, technical requirements, and costs. Determine to what extent addition of such software capability would benefit the program.
- F. Assess current levels of program marketing and evaluate the cost effectiveness of additional support from a professional public relations firm.
- G. Based on the above, and with the goal of maximizing the cost effective use of conservation, make recommendations regarding optimal program elements, software acquisition, staffing levels, consultant support, and feasible conservation targets.

# Task #6 – Overall Water Supply Management Assessment

- A. Based on the team's water supply planning expertise and knowledge of current trends in the water field in California, provide an overall assessment of the City's current LTWSP.
- B. For consideration during the LTWSP update, conceptually identify opportunities for system improvements, changes in operating procedures, modified water delivery schedules, or regional cooperation that could increase supply reliability, reduce operating and capital costs, and/or minimize energy consumption.

The following provides an approximate prioritization of the various tasks

Task#	Description	Approximate Portion of Study Costs
1	Project Administration, Research, and Reporting	10%
2	State Water Reliability Assessment	10%
3	Localized Climate Change Impact Assessment	10%
4	Recycled Water Expansion Assessment	40%
5	Conservation Opportunities Assessment	20%
6	Overall Water Supply Management Assessment	10%

# Services to be Provided by the City

- 1. Provide general direction to the consultant through the City's Water Resources Manager.
- 2. Provide access to and copies of available drawings, reports, records and other relevant information.
- 3. Meet with consultant as needed to discuss issues that arise during the course of the study.

### **Proposal Submittal Requirements**

Please submit a letter proposal with your proposed approach and fee for completing the work described above. Proposals should include, but are not limited to the following:

- 1. Summary of proposed approach;
- 2. Scope of work, including all major tasks and deliverables;
- 3. Project schedule including consultant's available starting date, key milestones, and project completion date;
- 4. List of key project staff and a summary of qualifications, particularly with regard to the identified project manager;
- 5. A list of three similar recent projects for public water agencies with current contact names and phone numbers;
- 6. Indication of the consultant's willingness to sign the City's standard service contract; and
- 7. An itemized cost proposal in spreadsheet format addressing all tasks in the scope of services above and including:
  - a. An inventory of all proposed project personnel by task
  - b. Proposed hours (level of effort) and hourly billing rates for all project personnel by task (including sub-consultant personnel)
  - c. Proposed indirect cost rates and fee.
  - d. A clear statement of total proposed dollar amount.

Proposals should not exceed 5 pages (not including resumes and attachments). Please submit six (6) hard copies and an electronic version in PDF format.

The selected consultant will be expected to enter into the City's standard agreement for professional services (sample included on the FTP site). Proposers are advised to carefully examine the FTP site for information on the City's requirements for insurance, indemnification, living wage compliance, and non-discrimination. The selected consultant will also be expected to obtain a City of Santa Barbara business license prior to execution of a contract.

Proposals must be submitted in person, by U.S. Mail, or by courier delivery to:

Purchasing Division City of Santa Barbara 310 East Ortega Street Santa Barbara, CA 93101.

Telephone: (805) 564-5349

**Proposals are due no later than 3:00 p.m. August \_\_\_\_, 2008.** Late proposals will not be accepted. Proposals will not be accepted by fax.

#### **Selection Process and Criteria**

Proposals will be evaluated on the basis of the following elements:

- Demonstrated ability and experience of the project team, and the proposed project manager in particular, with the topic areas identified in the list of tasks above, particularly with regard to recycled water and conservation opportunities;
- Responsiveness of the proposal to the requirements of the Request For Proposals and the consultant's understanding of and approach to the project objectives;
- The ability of the consultant to begin the project promptly and complete it within the desired timeframe;
- Information obtained from references:
- The proposed cost to complete the project; and
- Willingness to sign the City's standard contract.

Interviews by phone or in person will be scheduled only if necessary to identify the most qualified consultant team. The City will enter into negotiations with the most qualified team. If negotiations are not successful, the City will enter into negotiations with the next most qualified team.

Please direct any questions regarding this Request For Proposals to Bill Ferguson, Water Resources Supervisor, at (805) 564-5571.